



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/526,222

03/01/2005

George Michael Robertson

2005_0114A

6872

513 7590 04/30/2008

WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

LEWIS, JONATHAN V

ART UNIT

PAPER NUMBER

2623

MAIL DATE

DELIVERY MODE

04/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,222	Applicant(s) ROBERTSON, GEORGE MICHAEL	
	Examiner JONATHAN LEWIS	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 62-110 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 62-110 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/01/2005; 07/05/2007; 08/02/2007; 12/19/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 75 is objected to because of the following informalities: "advertisements,. temporarily". The period should be struck through. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim(s) 95-107 is rejected under 35 U. S. C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 95-107 defines a signal processing program embodying functional descriptive material. However, the claim does not define a computer readable medium or memory and is thus non-statutory for that

reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" - Guidelines Annex IV). That is, the scope of the presently claimed signal processing program can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 62-70, 72-73, 79-88, 90-91, 93-103, 105-106, 108-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US Pat. No. 6,934,917) in view of Matthews (US Pat. No. 6,037,877) in further view of Eldering et al. (US PG Pub. No. 2007/0240181).

Regarding claim 62 (new), Lin teaches a method for controlling channel changes in television or digital radio having a tuner or receiver (col. 1, line 48 – col. 2, line 6 discloses the utilization of a favorite channel list to control channel changes in television; the television with receiver/tuner is shown in Fig. 1), the method involving monitoring channel change commands received from a user over a zapping session during which channels are discarded (col. 3, line 66 – col. 4, line 62 shows the tables

which monitor the channel change commands over zapping sessions; Fig. 4, step 200 shows the discarding of an undesirable channel); identifying discarded channels (Fig. 3, 94 shows the menu where the discarded channel 98 is identified).

Lin teaches all the claim limitations as stated above, except preventing the tuner or receiver from returning to the discarded channels during the rest of the zapping session or unless it is determined that a programme transmitted on the discarded channel has changed.

However, Matthews teaches preventing the tuner or receiver from returning to the discarded channels during the rest of the zapping session or unless it is determined that a programme transmitted on the discarded channel has changed (Abstract teaches that once the channels have been removed from the scrolling list, then the user tuner is prevented from returning to the discarded channel; the zapping session is initiated by the user pressing the "LOOP" button as disclosed in col. 2, lines 46-62).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to prevent the tuner from returning to the discarded channels during the rest of the session, in order to allow the user to define a specific subset of channels of interest from the total available list of channels.

Lin in view of Matthews teaches all the claim limitations as stated above, except the step of identifying discarded channels involves monitoring a time for which the viewer viewed the channel and on the basis of this, determining whether the channel is discarded.

However, Eldering et al. teaches the step of identifying discarded channels involves monitoring a time for which the viewer viewed the channel and on the basis of this, determining whether the channel is discarded (Fig. 6A shows the monitoring of the time a viewer viewed the channel; page 6, 0092 discloses discarding the channel based on the length of the zapping or surfing).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to monitor the viewing time of a channel and discard channels based on this information, in order to give content providers the most accurate information when determining the most relevant, targeted programming and advertising to provide for the viewer's interests.

Regarding claim 63, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except setting a determining whether the channel is to be discarded.

However, Lin teaches setting a determining whether the channel is to be discarded (Fig. 4, 190).

Regarding claim 64, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except if the monitored viewing time is at most the viewing time threshold, then the channel is discarded.

However, Eldering et al. teaches if the monitored viewing time is at most the viewing time threshold, then the channel is discarded (page 6, 0092).

Regarding claim 65, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except if the monitored viewing time is at most the viewing time threshold, then the channel is retained.

However, Eldering et al. teaches if the monitored viewing time is at most the viewing time threshold, then the channel is retained (page 6, 0094).

Regarding claim 66, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except if the monitored viewing time is at least the viewing time threshold, then the channel is discarded.

However, Eldering et al. teaches if the monitored viewing time is at least the viewing time threshold, then the channel is discarded (page 6, 0092).

Regarding claim 67, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except if the monitored viewing time is at least the viewing time threshold, then the channel is retained.

However, Eldering et al. teaches if the monitored viewing time is at least the viewing time threshold, then the channel is retained (page 6, 0094).

Regarding claim 68, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except receiving a user input indicative of the time set.

However, Lin teaches receiving a user input indicative of the time set (Fig 5, 132 shows the user setting the start time by viewing the current channel and the end time of the previous channel).

Regarding claim 69, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except determining whether a programme on a particular channel has changed.

However, Eldering et al. teaches determining whether a programme on a particular channel has changed (page 5, 0082).

Regarding claim 70, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except the step of determining whether a programme has changed involves comparing programme identifiers for the previously viewed programme and the currently viewed programme.

However, Eldering et al. teaches the step of determining whether a programme has changed involves comparing programme identifiers for the previously viewed programme and the currently viewed programme (page 5, 0082).

Regarding claim 72, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except receiving a control signal from the user that indicates that a channel zapping session is starting, this signal prompting the start of the step of monitoring the channels zapped to and those discarded.

However, Lin teaches receiving a control signal from the user that indicates that a channel zapping session is starting (Fig. 4, 100 shows the scan button depressed by the user to start the zapping session), this signal prompting the start of the step of monitoring the channels zapped to and those discarded (Fig. 4, 110 shows the automatic zapping, step 190 shows the channels chosen to be discarded).

Regarding claim 73, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except the method involves receiving from a user a signal that is indicative of a command to stop the channel zapping session.

However, Lin teaches the method involves receiving from a user a signal that is indicative of a command to stop the channel zapping session (Fig. 4, 125 shows the selection of a channel, which stops the zapping as shown in Fig. 5).

Regarding claim 79, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except monitoring programme changes; identifying the most recently provided or broadcast programme and presenting the most recently provided or broadcast programme to the user in response to a channel change command.

However, Matthews teaches monitoring programme changes (Abstract); identifying the most recently provided or broadcast programme and presenting the most recently provided or broadcast programme to the user in response to a channel change command (Fig. 1).

Regarding claim 93, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except a display for showing the programmes on.

However, Lin teaches a display for showing the programmes on (Fig. 3).

Regarding claim 94, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except being adapted to receive channel change commands from a remote control.

However, Lin teaches being adapted to receive channel change commands from a remote control (Fig. 1/Fig. 2).

Regarding claim 108, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except a set top box that includes a system or computer program as defined in claim 95.

However, Lin teaches a set top box that includes a system or computer program as defined in claim 95 (Fig. 1).

Regarding claim 109, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except a television system that includes a system or computer program as defined in claim 95.

However, Lin teaches a television system that includes a system or computer program as defined in claim 95 (Fig. 1).

System and computer program claims 80-88, 90-91, 95-103, 105-106 are rejected for the same reasons as stated above, in the corresponding method claims.

Claims 71, 89, and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US Pat. No. 6,934,917) in view of Matthews (US Pat. No. 6,037,877) in further view of Eldering et al. (US PG Pub. No. 2007/0240181) in further view of Maissel et al. (US Pat. No. 6,637,029).

Regarding claim 71, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except the step of determining whether a programme on a particular channel has changed involves monitoring real time; identifying programme scheduling information for a particular channel and using the scheduling information and real time to determine whether there is a change in the currently broadcast programme.

However, Maissel et al. teaches the step of determining whether a programme on a particular channel has changed involves monitoring real time (col. 19, lines 16-30 disclose the real time monitoring of audience participation of a program on a particular channel); identifying programme scheduling information for a particular channel and using the scheduling information and real time to determine whether there is a change in the currently broadcast programme (col. 19, lines 16-30 identifies the change program based on the real time information from the audience and it's scheduling information is included in the information to determine the change in the Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to monitor program changes in real time and identify scheduling information, in order to provide an improved electronic program guide to the end user, where the most up to date information is readily available.

System and computer program claims 89 and 104 are rejected for the same reasons as stated above, in the corresponding method claim.

Claims 74, 92, and 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US Pat. No. 6,934,917) in view of Matthews (US Pat. No.

6,037,877) in further view of Eldering et al. (US PG Pub. No. 2007/0240181) in further view of Ellis et al. (US Pat. No. 5,986,650).

Regarding claim 74, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except terminating the channel zapping session if no channel change commands are received over a pre-determined time.

However, Ellis et al. teaches terminating the channel zapping session if no channel change commands are received over a pre-determined time (col. 10, line 59—col. 11, line 7).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to stop a zapping session over a predetermined time if no channel is changed, in order to allow a user to choose from a plurality of channels viewed on an EPG, while the system periodically stops the scanning process for the user's convenience, ensuring that once an automatic zapping process has begun it will not wastefully continue if the user is no longer paying attention.

System and computer program claims 92 and 107 are rejected for the same reasons as stated above, in the corresponding method claim.

Claims 75-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US Pat. No. 6,934,917) in view of Matthews (US Pat. No. 6,037,877) in further view of Eldering et al. (US PG Pub. No. 2007/0240181) in further view of Matz et al. (US Pat. No. 7,360,160).

Regarding claim 75, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except identifying an advertisement,. temporarily excluding the channel that the advertisement is being shown on from the pool of available channels and reintroducing the channel when the advertisement is finished.

However, Matz et al. teaches identifying an advertisement (Fig. 5, 510 shows the identification of the advertisement with a tag),. temporarily excluding the channel that the advertisement is being shown on from the pool of available channels and reintroducing the channel when the advertisement is finished (Fig. 12 shows the blocking and presentation of the desired content after the content, the advertisement is blocked).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to identify and remove an advertisement, in order to present the user with only desired content based on his/her user profile.

Regarding claim 76, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except identifying an advertisement and showing material, such as a video clip or text, which is associated with the programme that is to be shown when the advertisement is finished.

However, Matz et al. teaches identifying an advertisement and showing material, such as a video clip or text, which is associated with the programme that is to be shown when the advertisement is finished (Fig. 18).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to identify and remove an advertisement, in order to present the user with only desired content based on his/her user profile.

Regarding claim 77, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except involving recording a portion of the programme shown immediately preceding the advertisement and displaying this to the user during the advertisement.

However, Matz et al. teaches involving recording a portion of the programme shown immediately preceding the advertisement and displaying this to the user during the advertisement (Fig. 14).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to identify and remove an advertisement, in order to present the user with only desired content based on his/her user profile.

Regarding claim 78, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except carrying out the step of recording for all available channels.

However, Matz et al. teaches carrying out the step of recording for all available channels (Fig. 2).

Claim 110 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US Pat. No. 6,934,917) in view of Matthews (US Pat. No. 6,037,877) in further view of Eldering et al. (US PG Pub. No. 2007/0240181) in further view of Hendricks et al. (US Pat. No. 5,798,785).

Regarding claim 110, Lin in view of Matthews in further view of Eldering et al. teaches all the claim limitations as stated above, except a digital radio that includes a system or computer program as defined in claim 95.

However, Hendricks et al. teaches a digital radio that includes a system or computer program as defined in claim 95 (col. 10, lines 47-55 disclose the digital radio).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to selectively channel zap in a digital radio, in order to allow the system to handle a large number of programming channels not limited to just television, thereby providing this service to an even greater audience.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. De Lange et al. US PG Pub. No. 2002/0062484
- b. Oz et al. US Pat. No. 7,237,251
- c. Du et al. US Pat. No. 7,260,824
- d. Macrae et al. US PG Pub. No. 2003/0128300
- e. Thompson US PG Pub. No. 2003/0018973
- f. Matz et al. US Pat. No. 7,020,652

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN LEWIS whose telephone number is (571)270-3233. The examiner can normally be reached on Mon - Fri 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on (571) 272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2623